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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/777,674	02/07/2001	Kiichi Ueyanagi	108551	3351

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EXAMINER

PSITOS, ARISTOTELIS M

ART UNIT	PAPER NUMBER
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2653

DATE MAILED: 01/10/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/777,674

Applicant(s)

UEYANAGI, KIICHI

TB

Examiner

Aristotelis M Psitos

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 October 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-65 is/are pending in the application.
- ✓ 4a) Of the above claim(s) 12-65 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7,9-11 and 56 is/are rejected.
- 7) ☒ Claim(s) 8 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 February 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

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1. Applicant's response of 10/7/02 has been considered with the following results.

Claims 12-55, 57-65 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected inventions/species, there being no allowable generic or linking claim.

Applicant timely traversed the restriction (election) requirement in Paper No. 5.

Applicant's arguments against the previously stated restriction requirement has been considered but not persuasive for the following additional reasons:

a) applicant argues that Groups I and II as well as Groups I and III, and Groups I and IV are really related as subcombination – combination relationship.

Assuming such a position is correct, as noted by applicant that restriction would be proper if the Combination claims do not require the particular of the subcombination – which is readily seen and as argued by applicant exists in each of the identified groupings, and if different relationships/separate utility.

It is noted that independent claim 1 (of Group I) has utility in of itself such as a use is a static far-field system. Such systems are found in magneto-optic cards for instance. The reason for requiring a restriction is not only because of their distinctness (unless applicant is convinced that these are mere obvious variants over one another), ^{but also} and because of their separate fields of search as identified in the previous OA.

The examiner maintains his previous position that the claims are subcombinations disclosed as useable in a single combination but no single combination claim has been presented.

b) Applicant also argues that the examiner has failed to establish a reason for proper restriction because the action has failed to demonstrate that one of the subcombinations has utility other than in the disclosed combination. The examiner maintains this position because as noted in the previous OA, the selected subcombination – Group I - does have utility in a non- SIL MO system.

The examiner regrets any inconvenience to applicant in his choice of phraseology, nevertheless the examiner maintains such since the examiner concludes such claims require no near field ability and dynamic movement and use in reading in a static system, for example, a mo card - (as opposed to a dynamic system – class 365 as opposed to class 369). The examiner intended to convey to applicant by using the phrase non-sil mo system. The examiner agrees that no such limitation is found in this group of

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claims; nevertheless, such an environment is not precluded from using such claimed elements and hence further requiring a field of search not co-extensive with the other fields of search. Alternative uses of such elements, as used in image analysis (class 382), and/or semiconductor lasers (class 372) are also possible.

c) With respect to the "divergent" subject matter – this is established by the designated subclasses identified as fields of search.

d) With respect to the number of species, the examiner notes that restriction between species is proper – further attention is drawn to MPEP 808.01 (a) and that since NO allowable generic claim has been found (see action on the merits below), the restriction is proper. Stated another way, if an allowable generic claim is found, then a reasonable number of species would be rejoined since the no reason to insist upon the species election would be maintained.

e) With respect to the species indicated with Group III, applicant's arguments are not understood because as argued applicant has indicated they are mutually exclusive since they don't have the similar/same requirements – i.e., a species with shading requirements

f) Finally, the searches of the identified inventions are NOT co-extensive and hence do present a serious burden to the examiner.

g) With respect to the newly introduced claims 56-65 they are interpreted as indicated below and are drawn to a NON elected invention (Group I) and species – non-shading.

1) claim 56 is drawn to a shading species – species not elected by applicant

2) claim 57 is identical to claim 23 already presented and hence would be included with the claims of Group II.

3) claims 58-60 and 62-65 are identical to claims 25,29,32,25,51,52 and 53 respectively, and hence drawn to Group III.

4) claim 61 identical to claim 43 and hence drawn to Group IV.

Applicant has argued that these claims are linking claims. The examiner respectfully disagrees, claim 1 is the linking claim^s, it links all of the above noted dependent claims, and each dependent claim is different from each other. Hence since none of the newly introduced dependent claims are drawn to the

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elected subject matter they are withdrawn from consideration – see however the position taken with respect to claim 56.

✓✓ Hence, the examiner concludes that the reasons for presenting the restriction requirement are proper and made FINAL.

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Information Disclosure Statement

The IDS of 3/22/01 is made of record.

(1) Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

3. Claim 56 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 56 recites a shading element. How this can be read upon the elected non-shading species is not understood. No art rejection is made on this claim. replot ✓

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

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Claims 1 and 11 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Nakao et al further considered with Ishii/Smith

Nakao et al disclose a magnetooptic device comprising of a semiconductor laser and a thin film magnetic transducer, which meets the claimed "stacked on the semiconductor laser" phrase.

Applicant's attention is drawn to figures 1, 14 and column 9 line 55 to col. 10 line 56 as well as col. 13, lines 1-3 (claim 15/13/1). Under 102 considerations, the examiner interprets the placement of the magnetic coil 29 as thin-film as "stacked" accordingly.

Alternatively, under 103 considerations, the placement of the coil arrangement (thin film type further taught by either Ishii/Smith) as an obvious relocation of parts – that is placing the coil arrangement closer to the laser and hence reducing the number of element and cost of the overall system.

It would have been obvious to modify the base system of Nakao et al with the ability of relocating parts/the coil closer to the laser itself and hence reducing the number of elements required for the optical head and thereby saving resources and or reducing the cost of manufacturing.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. ✓ Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. Claims 2-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over the art as applied to claims 1 and 11 above, and further in view of Bischoff et al.

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With respect to the limitations of claim 2, the appropriately winding of a coil around a core for the electromagnetic transducer is found Bischoff et al.

It would have been obvious to modify the base system of the references above with the additional teaching from Bischoff et al, motivation is to use acknowledged thin-film coil constructs and save valuable resource – time & cost in recreating established thin-film structures.

With respect to the limitations of claims 3,4 and 9, the examiner interprets that the gap as recited is indeed placed on the output surface when the modification under 103 purposes stated above with respect to claim 1, that is replacing the position of the magnetic coils/transducer closer to/in contact with the laser and hence the gap(s) is/are appropriately located.

With respect to claim 5, the examiner interprets the coil arrangement of Nakao et al to include plural windings, and hence meeting this limitation. Alternatively either Ishii or Smith teach plural windings for his coil arrangement, and use of such plural windings is considered obvious in order to properly generate a magnetic field of sufficient strength – i.e., the relation ship between number of coils and magnetic field strength.

It would have been obvious to modify the base system of Nakao et al as further modified (relocation of elements) and further with the above teaching from either Ishii or Smith to increase the magnetic field strength of the final output signal.

With respect to claims 6 and 7, although the shape of the coil arrangement is not specified in the Nakao et al document, obviously there must be some shape. Selection between different shapes, circular, cylindrical, rectangular is deemed merely a selection between alternative equivalents predicated on the size/shape of the desired magnetic field and further taught by the Ishii document.

It would have been obvious to modify the base system of Nakao et al as further modified with the relocation of elements/parts and Ishii/Smith and further with the above teaching from Ishii with respect to the shape of the coil motivation is to select a shape of the final magnetic field to a desired shape since no unexpected results are seen to occur from field shape selection.

7. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over the art as applied to claim 2 above, and further in view of Official notice.

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The vertical cavity surface emitting semiconductor limitation of claim 10 is considered to be of a well know/established type of semiconductor and Official notice is taken thereof.

It would have been obvious to modify the base system as relied upon with respect to claim 2 with the above well know semiconductor type motivation is to use established laser semiconductors and save valuable resources, such as time and money.

Allowable Subject Matter

8. Claim 8 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The examiner cannot reconcile a figure with the above-indicated allowable claim 8. Applicant's cooperation in identifying such would be greatly appreciated. If no such figure is presently found in the application then applicant is required to submit a formal drawing with such limitation contained therein as required under 37 CFR 1.83 (a).

Albertini et al, Bell and Miyauchi et al are cited as interest of mo devices and heads in this environment.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aristotelis M Psitos whose telephone number is (703) 308-1598. The examiner can normally be reached on M-Thursday 8 - 4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William R. Korzuch can be reached on (703) 305-6137. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and (703) 872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.

Aristotelis M Psitos
Primary Examiner
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January 9, 2003